#11

RECEIVED
FEB 13 2002
1644
TECH CENTER 1600/2900

1600

RAW SEQUENCE LISTING DATE: 02/05/2002
PATENT APPLICATION: **US/09/458,302A** TIME: 11:34:07

Input Set : **A:\-144.app**
Output Set: **N:\CRF3\02052002\I458302A.raw**

P.S

ENTERED

```
 4 <110> APPLICANT: Epimmune, Inc.
 5       John Fikes
 6       Alessandro Sette
 7       John Sidney
 8       Scott Southwood
 9       Robert Chesnut
10       Esteban Celis
11       Elissa Keogh
12       Epimmune Inc.
14 <120> TITLE OF INVENTION: Inducing Cellular Immune Responses to
15       Carcinoembryonic Antigen Using Pepetide and Nucleic Acid
16       Compositions
18 <130> FILE REFERENCE: 018623-014400US
20 <140> CURRENT APPLICATION NUMBER: US 09/458,302A
21 <141> CURRENT FILING DATE: 1999-12-10
23 <150> PRIOR APPLICATION NUMBER: US 08/027,146
24 <151> PRIOR FILING DATE: 1993-03-05
26 <150> PRIOR APPLICATION NUMBER: US 08/073,205
27 <151> PRIOR FILING DATE: 1993-06-04
29 <150> PRIOR APPLICATION NUMBER: US 08/159,184
30 <151> PRIOR FILING DATE: 1993-11-29
32 <150> PRIOR APPLICATION NUMBER: US 08/205,713
33 <151> PRIOR FILING DATE: 1994-03-04
35 <150> PRIOR APPLICATION NUMBER: US 09/189,702
36 <151> PRIOR FILING DATE: 1998-11-10
38 <160> NUMBER OF SEQ ID NOS: 2385
40 <170> SOFTWARE: FastSEQ for Windows Version 4.0
42 <210> SEQ ID NO: 1
43 <211> LENGTH: 8
44 <212> TYPE: PRT
45 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:
48 <223> OTHER INFORMATION: Artificial Peptide
50 <400> SEQUENCE: 1
51 Ala Ser Asn Pro Pro Ala Gln Tyr
52  1               5
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 10
57 <212> TYPE: PRT
58 <213> ORGANISM: Artificial Sequence
60 <220> FEATURE:
61 <223> OTHER INFORMATION: Artificial Peptide
63 <400> SEQUENCE: 2
```

RAW SEQUENCE LISTING DATE: 02/05/2002
PATENT APPLICATION: US/09/458,302A TIME: 11:34:07

Input Set : A:\-144.app
Output Set: N:\CRF3\02052002\I458302A.raw

64 Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp
65 1 5 10
68 <210> SEQ ID NO: 3
69 <211> LENGTH: 11
70 <212> TYPE: PRT
71 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Artificial Peptide
76 <400> SEQUENCE: 3
77 Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe
78 1 5 10
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 8
83 <212> TYPE: PRT
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: Artificial Peptide
89 <400> SEQUENCE: 4
90 Ala Ser Asn Pro Ser Pro Gln Tyr
91 1 5
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 10
96 <212> TYPE: PRT
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Artificial Peptide
102 <400> SEQUENCE: 5
103 Ala Ser Asn Pro Ser Pro Gln Tyr Ser Trp
104 1 5 10
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 8
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Artificial Peptide
115 <400> SEQUENCE: 6
116 Ala Thr Gly Gln Phe Arg Val Tyr
117 1 5
120 <210> SEQ ID NO: 7
121 <211> LENGTH: 11
122 <212> TYPE: PRT
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Artificial Peptide
128 <400> SEQUENCE: 7
129 Asp Leu Val Asn Glu Glu Ala Thr Gly Gln Phe
130 1 5 10
133 <210> SEQ ID NO: 8
134 <211> LENGTH: 9

RAW SEQUENCE LISTING DATE: 02/05/2002
PATENT APPLICATION: US/09/458,302A TIME: 11:34:07

Input Set : A:\-144.app
Output Set: N:\CRF3\02052002\I458302A.raw

```
135 <212> TYPE: PRT
136 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: Artificial Peptide
141 <400> SEQUENCE: 8
142 Asp Ser Val Ile Leu Asn Val Leu Tyr
143  1               5
146 <210> SEQ ID NO: 9
147 <211> LENGTH: 9
148 <212> TYPE: PRT
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Artificial Peptide
154 <400> SEQUENCE: 9
155 Glu Ile Gln Asn Thr Thr Tyr Leu Trp
156  1               5
159 <210> SEQ ID NO: 10
160 <211> LENGTH: 10
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Artificial Peptide
167 <400> SEQUENCE: 10
168 Glu Ile Gln Asn Thr Thr Tyr Leu Trp Trp
169  1               5                  10
172 <210> SEQ ID NO: 11
173 <211> LENGTH: 10
174 <212> TYPE: PRT
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Artificial Peptide
180 <400> SEQUENCE: 11
181 Glu Ser Pro Ser Ala Pro Pro His Arg Trp
182  1               5                  10
185 <210> SEQ ID NO: 12
186 <211> LENGTH: 9
187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Artificial Peptide
193 <400> SEQUENCE: 12
194 Glu Thr Gln Asp Ala Thr Tyr Leu Trp
195  1               5
198 <210> SEQ ID NO: 13
199 <211> LENGTH: 10
200 <212> TYPE: PRT
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Artificial Peptide
```

RAW SEQUENCE LISTING DATE: 02/05/2002
PATENT APPLICATION: US/09/458,302A TIME: 11:34:07

Input Set : A:\-144.app
Output Set: N:\CRF3\02052002\I458302A.raw

206 <400> SEQUENCE: 13
207 Glu Thr Gln Asp Ala Thr Tyr Leu Trp Trp
208 1 5 10
211 <210> SEQ ID NO: 14
212 <211> LENGTH: 11
213 <212> TYPE: PRT
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Artificial Peptide
219 <400> SEQUENCE: 14
220 Gly Ile Pro Gln Gln His Thr Gln Val Leu Phe
221 1 5 10
224 <210> SEQ ID NO: 15
225 <211> LENGTH: 11
226 <212> TYPE: PRT
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Artificial Peptide
232 <400> SEQUENCE: 15
233 Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe
234 1 5 10
237 <210> SEQ ID NO: 16
238 <211> LENGTH: 11
239 <212> TYPE: PRT
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Artificial Peptide
245 <400> SEQUENCE: 16
246 Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr
247 1 5 10
250 <210> SEQ ID NO: 17
251 <211> LENGTH: 8
252 <212> TYPE: PRT
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Artificial Peptide
258 <400> SEQUENCE: 17
259 His Leu Phe Gly Tyr Ser Trp Tyr
260 1 5
263 <210> SEQ ID NO: 18
264 <211> LENGTH: 10
265 <212> TYPE: PRT
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Artificial Peptide
271 <400> SEQUENCE: 18
272 His Ser Ala Ser Asn Pro Ser Pro Gln Tyr
273 1 5 10
276 <210> SEQ ID NO: 19

RAW SEQUENCE LISTING DATE: 02/05/2002
PATENT APPLICATION: US/09/458,302A TIME: 11:34:07

Input Set : A:\-144.app
Output Set: N:\CRF3\02052002\I458302A.raw

```
277 <211> LENGTH: 11
278 <212> TYPE: PRT
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Artificial Peptide
284 <400> SEQUENCE: 19
285 His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr
286  1               5                  10
289 <210> SEQ ID NO: 20
290 <211> LENGTH: 8
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Artificial Peptide
297 <400> SEQUENCE: 20
298 Ile Ile Gln Asn Asp Thr Gly Phe
299  1               5
302 <210> SEQ ID NO: 21
303 <211> LENGTH: 9
304 <212> TYPE: PRT
305 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: Artificial Peptide
310 <400> SEQUENCE: 21
311 Ile Ile Gln Asn Asp Thr Gly Phe Tyr
312  1               5
315 <210> SEQ ID NO: 22
316 <211> LENGTH: 9
317 <212> TYPE: PRT
318 <213> ORGANISM: Artificial Sequence
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Artificial Peptide
323 <400> SEQUENCE: 22
324 Ile Ile Ser Pro Pro Asp Ser Ser Tyr
325  1               5
328 <210> SEQ ID NO: 23
329 <211> LENGTH: 8
330 <212> TYPE: PRT
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Artificial Peptide
336 <400> SEQUENCE: 23
337 Ile Ser Pro Leu Asn Thr Ser Tyr
338  1               5
341 <210> SEQ ID NO: 24
342 <211> LENGTH: 8
343 <212> TYPE: PRT
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
```

Use of *n* and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 02/05/2002
PATENT APPLICATION: US/09/458,302A TIME: 11:34:08

Input Set : A:\-144.app
Output Set: N:\CRF3\02052002\I458302A.raw

L:31067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2385